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APPLICANT: Joseph Peter Robert Tosey et al.   CONFIRMATION NO.: 8023

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

This paper is in support of a Notice of Appeal filed October 24, 2011, of the Office

Action dated August 31, 2011, to the Board of Patent Appeals and Interferences.

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Real Party in Interest

Sierra Wireless, Inc.

Related Appeals and Interferences

None.

Status of Claims

Claims 1-62 are now pending.

No claims stand allowed.

Status of Amendments

No amendments after final have been filed. All amendments have been entered.

Summary of Claimed Subject Matter

The claimed subject matter relates to personal data management applications. (¶[0001]). Specifically, the present invention relates to a mail server based system that allows for synchronization of personal data management records. (¶[0001]). Standard mail servers may be used to assist the synchronization of application data across multiple devices. (¶[0013]). This allows the synchronization of application data without requiring contemporaneous operation of the synchronization partner devices. (¶[0013]). This may be accomplished by generating a record for each change to a database on a first device. (¶[0013]). Upon synchronization of the first device with the mail server, the changes since the last synchronization may be uploaded to the mail server and stored in a mailbox for a user associated with the device. (¶[0013]). If a second device associated with the user then attempts to synchronize with the mail server, the records may be downloaded and the corresponding changes implemented in the database on the second device. (¶[0013]).

Claim 1 is directed to a method. The method includes, by a mail server, receiving information from a first user computing device regarding every change made to an application database located on the first user computing device. (FIG. 4, reference numeral 400; ¶ [0028]). The method also includes, by the mail server, storing the information in a mail folder on the mail server, the mail folder corresponding to a user associated with the first user computing device and a second user computing device maintaining a copy of the application database. (FIG. 4, reference numeral 402; ¶ [0028]). The method also includes, by the mail server, receiving a synchronization request from the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]). The method also includes, responsive to the synchronization request, forwarding, by

the mail server, the information from the mail folder to the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]).

Claim 9 is directed to a method. The method includes, by a first user computing device, generating a record each time an application database located on the first user computing device is changed, the record containing information regarding the change. (FIG. 5, reference numeral 500; ¶ [0029]). The method also includes, by the first user computing device, uploading each of the records generated since a last synchronization to a mail server. (FIG. 5, reference numeral 502; ¶ [0029]). The method also includes, by the mail server, storing each of the records in a mailbox on the mail server, the mailbox for a user associated with the first user computing device and a second user computing device. (FIG. 5, reference numeral 504; ¶ [0029]). The method also includes, by the mail server, receiving a synchronization request from the second user computing device. (FIG. 5, reference numeral 502; ¶ [0029]). The method also includes, responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device. (FIG. 5, reference numeral 506; ¶ [0029]). The method also includes, by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 5, reference numeral 508; ¶ [0029]).

Claim 18 is directed to a method. The method includes, by a first user computing device, generating a list of records of each change to an application database located on the first user computing device since a last synchronization, each record containing information regarding the corresponding change. (FIG. 6, reference numeral 600; ¶ [0030]). The method also includes, by

the first user computing device, uploading each of the records to a mail server. (FIG. 6, reference numeral 602; ¶ [0030]). The method also includes, by the mail server, storing each of the records in a mailbox on the mail server, the mailbox for a user associated with the first user computing device and a second user computing device. (FIG. 6, reference numeral 604; ¶ [0030]). The method also includes, by the mail server, receiving a synchronization request from the second user computing device. (FIG. 6, reference numeral 602; ¶ [0030]). The method also includes, responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device. (FIG. 6, reference numeral 606; ¶ [0030]). The method also includes, by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 6, reference numeral 608; ¶ [0030]).

Claim 27 is directed to an apparatus. (FIG. 7). The apparatus includes a memory. (FIG. 7, reference numeral 704; ¶ [0031]). The apparatus also includes a first user computing device database change information receiver configured to receive information from a first user computing device regarding every change made to an application database located on the first user computing device. (FIG. 7, reference numeral 700; ¶ [0031]). The apparatus also includes a first user computing device database change information mail folder storer coupled to the first user computing device database change information receiver and to the memory and configured to store the information in a mail folder corresponding to a user associated with the first user computing device and a second user computing device. (FIG. 7, reference numeral 702; ¶ [0031]). The apparatus is further configured to receive a synchronization request from the second user computing device. (FIG. 7; ¶ [0031]). The apparatus also includes a first user

computing device database change information forwarder coupled to the memory and configured to, responsive to the synchronization request, forward the information from the mail folder to the second user computing device. (FIG. 7, reference numeral 706; ¶ [0031]). The second user computing device is further configured to maintain a copy of the application database. (FIG. 7; ¶ [0031]).

Claim 29 is directed to an apparatus. (FIG. 8) The apparatus includes a first device application database change record generator configured to generate a record each time an application database is changed on a first user computing device. (FIG. 8, reference numeral 800; ¶ [0032]). The record contains information regarding the change. (FIG. 8; ¶ [0032]). The apparatus also includes a mail server change record uploader coupled to the first device application database change record generator and configured to upload each of the records generated since a last synchronization to a mail server. (FIG. 8, reference numeral 802; ¶ [0032]). The apparatus also includes a memory. (FIG. 8, reference numeral 806; ¶ [0032]). The apparatus also includes a change record mailbox storer coupled to the memory and configured to store each of the records in a mailbox on the mail server. (FIG. 8, reference numeral 804; ¶ [0032]). The mailbox is for a user associated with the first user computing device and a second user computing device. (FIG. 8; ¶ [0032]). The apparatus is further configured to receive a synchronization request from the second user computing device. (FIG. 8; ¶ [0032]). The apparatus also includes a change record second device downloader coupled to the memory and configured to, responsive to the synchronization request, download each of the records from the mailbox to the second user computing device. (FIG. 8, reference numeral 808; ¶ [0032]). The apparatus also includes a second device application database modifier coupled to the change

record second device downloader and configured to modify an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 8, reference numeral 810; ¶ [0032]).

Claim 31 is directed to an apparatus. (FIG. 9). The apparatus includes a first device application database change record list generator configured to generate a list of records of each change to an application database located on a first user computing device since a last synchronization. (FIG. 9, reference numeral 900; ¶ [0033]). Each record contains information regarding the corresponding change. (FIG. 9; ¶ [0033]). The apparatus also includes a mail server change record uploader coupled to the first device application database change record list generator and configured to upload each of the records to a mail server. (FIG. 9, reference numeral 902; ¶ [0033]). The apparatus also includes a memory. (FIG. 9, reference numeral 906; ¶ [0033]). The apparatus also includes a change record mailbox storer coupled to the memory and configured to store each of the records in a mailbox on the mail server. (FIG. 9, reference numeral 904; ¶ [0033]). The mailbox is for a user associated with the first user computing device and a second user computing device. (FIG. 9; ¶ [0033]). The apparatus is further configured to receive a synchronization request from the second user computing device. (FIG. 9; ¶ [0033]). The apparatus also includes a change record second device downloader coupled to the memory and configured to, responsive to the synchronization request, download each of the records from the mailbox to the second user computing device. (FIG. 9, reference numeral 908; ¶ [0033]). The apparatus also includes a second device application database modifier coupled to the change record second device downloader and configured to modify an application database located on the second user computing device with changes indicated by each of the downloaded

records. (FIG. 9, reference numeral 910; ¶ [0033]).

Claim 33 is directed to an apparatus. (FIG. 7). The apparatus includes a means (FIG. 7, reference numeral 700) for receiving, by a mail server, information from a first user computing device regarding every change made to an application database located on the first user computing device. (FIG. 4, reference numeral 400; ¶ [0028]). The apparatus also includes a means (FIG. 7, reference numeral 702) for storing, by the mail server, the information in a mail folder corresponding to a user associated with the first user computing device and a second user computing device. (FIG. 4, reference numeral 402; ¶ [0028]). The apparatus also includes a means (FIG. 7) for receiving, by the mail server, a synchronization request from the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]). The apparatus also includes a means (FIG. 7, reference numeral 706) for forwarding, by the mail server, the information from the mail folder to the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]). The second user computing device maintains a copy of the application database. (FIG. 4; ¶[0028]).

Claim 41 is directed to an apparatus. (FIG. 8). The apparatus includes a means (FIG. 8, reference numeral 800) for generating, by a first user computing device, a record each time an application database is changed on a first user computing device. (FIG. 5, reference numeral 500; ¶ [0029]). The record contains information regarding the change. (FIG. 5; ¶ [0029]). The apparatus also includes a means (FIG. 8, reference numeral 802) for uploading, by the first user computing device, each of the records generated since a last synchronization to a mail server. (FIG. 5, reference numeral 502; ¶ [0029]). The apparatus also includes a means (FIG. 8,

reference numeral 806) for storing, by the mail server, each of the records in a mailbox for a user associated with the first user computing device and a second user computing device. (FIG. 5, reference numeral 504; ¶ [0029]). The apparatus also includes a means (FIG. 5) for receiving, by the mail server, a synchronization request from the second user computing device. (FIG. 5, reference numeral 502; ¶ [0029]). The apparatus also includes a means (FIG. 8, reference numeral 808) for, responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device. (FIG. 5, reference numeral 506; ¶ [0029]). The apparatus also includes a means (FIG. 8, reference numeral 810) for modifying, by the second user computing device, an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 5, reference numeral 508; ¶ [0029]).

Claim 51 is directed to an apparatus. (FIG. 9). The apparatus includes a means (FIG. 9, reference numeral 900) for generating, by a first user computing device, a list of records of each change to an application database located on the first user computing device since a last synchronization. (FIG. 6, reference numeral 600; ¶ [0030]). Each record contains information regarding the corresponding change. (FIG. 6; ¶ [0030]). The apparatus also includes a means (FIG. 9, reference numeral 902) for uploading, by the first user computing device, each of the records to a mail server. (FIG. 6, reference numeral 602; ¶ [0030]). The apparatus also includes a means (FIG. 9, reference numeral 904) for storing, by the mail server, each of the records in a mailbox for a user associated with the first user computing device and a second user computing device. (FIG. 6, reference numeral 604; ¶ [0030]). The apparatus also includes a means (FIG. 9) for, by the mail server, receiving a synchronization request from the second user computing

device. (FIG. 6, reference numeral 602; ¶ [0030]). The apparatus also includes a means (FIG. 9, reference numeral 908) for, responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device. (FIG. 6, reference numeral 606; ¶ [0030]). The apparatus also includes a means (FIG. 9, reference numeral 910) for, by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 6, reference numeral 608; ¶ [0030]).

Claim 60 is directed to a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method. (Claim 60 as originally filed) The method includes, by a mail server, receiving information from a first user computing device regarding every change made to an application database located on the first user computing device. (FIG. 4, reference numeral 400; ¶ [0028]). The method also includes, by the mail server, storing the information in a mail folder on the mail server, the mail folder corresponding to a user associated with the first user computing device and a second user computing device maintaining a copy of the application database. (FIG. 4, reference numeral 402; ¶ [0028]) The method also includes, by the mail server, receiving a synchronization request from the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]) The method also includes, responsive to the synchronization request, forwarding, by the mail server, the information from the mail folder to the second user computing device. (FIG. 4, reference numeral 404; ¶ [0028]).

Claim 61 is directed to a program storage device readable by a machine, tangibly

embodying a program of instructions executable by the machine to perform a method. (Claim 61 as originally filed) The method includes, by a first user computing device, generating a record each time an application database located on the first user computing device is changed, the record containing information regarding the change. (FIG. 5, reference numeral 500; ¶ [0029]) The method also includes, by the first user computing device, uploading each of the records generated since a last synchronization to a mail server. (FIG. 5, reference numeral 502; ¶ [0029]) The method also includes, by the mail server, storing each of the records in a mailbox on the mail server, the mailbox for a user associated with the first user computing device and a second user computing device. (FIG. 5, reference numeral 504; ¶ [0029]). The method also includes, by the mail server, receiving a synchronization request from the second user computing device. (FIG. 5, reference numeral 502; ¶ [0029]) The method also includes, responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device. (FIG. 5, reference numeral 506; ¶ [0029]) The method also includes, by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded records. (FIG. 5, reference numeral 508; ¶ [0029]).

Claim 62 is directed to a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method. (Claim 62 as originally filed). The method includes, by a first user computing device, generating a list of records of each change to an application database located on the first user computing device since a last synchronization, each record containing information regarding the corresponding change. (FIG. 6, reference numeral 600; ¶ [0030]). The method also includes, by the first user

computing device, uploading each of the records to a mail server. (FIG. 6, reference numeral

602; ¶ [0030]). The method also includes, by the mail server, storing each of the records in a

mailbox on the mail server, the mailbox for a user associated with the first user computing

device and a second user computing device. (FIG. 6, reference numeral 604; ¶ [0030]). The

method also includes, by the mail server, receiving a synchronization request from the second

user computing device. (FIG. 6, reference numeral 602; ¶ [0030]). The method also includes,

responsive to the synchronization request, downloading, by the mail server, each of the records

from the mailbox to the second user computing device. (FIG. 6, reference numeral 606; ¶

[0030]). The method also includes, by the second user computing device, modifying an

application database located on the second user computing device with changes indicated by

each of the downloaded records. (FIG. 6, reference numeral 608; ¶ [0030]).

Grounds of Rejection to be Reviewed on Appeal

Whether Claims 1-2, 5, 8-11, 14, 17-20, 23, 26-34, 37, 39-43, 46, 49-53, 56, and 59-62 are unpatentable under 35 U.S.C. § 103(a) over Rigaldies et al.[1] in view of Oberhaus et al.[2]

Whether Claims 3, 12, 21, 35, 44, and 54 are unpatentable under 35 U.S.C. § 103(a) over Rigaldies et al. in view of Oberhaus et al. and further in view of Christie et al.[3]

Whether Claims 4, 6, 13, 15, 22, 24, 36, 38, 45, 47, 55, and 57 are unpatentable under 35 U.S.C. § 103(a) over Rigaldies et al. in view of Oberhaus et al. and further in view of LaRue et al.[4]

Whether Claims 7, 16, 25, 48, and 58 are unpatentable under 35 U.S.C. § 103(a) over Rigaldies et al. in view of Oberhaus et al. and further in view of Malik.[5]

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[1] U.S. Patent No. 6,792,085 to Rigaldies et al.
[2] U.S. Patent No. 6,983,308 to Oberhaus et al.
[3] U.S. Patent No. 5,757,669 to Christie et al.
[4] U.S. Patent No. 6,449,622 to LaRue et al.
[5] U.S. Publication No. 2002/0065892 to Malik.

Argument

Rejection of Claims 1-2, 5, 8-11, 14, 17-20, 23, 26-34, 37, 39-43, 46, 49-53, 56, and 59-62 under

35 U.S.C. § 103(a)

        In support of the Examiner's rejection, the Examiner refers to portions of <u>Rigaldies et</u>

<u>al</u>. that disclose a form of direct connection synchronization discussed in the Background

section of the present application, where an agent 110 on a workstation 101 updates a

voicemail server 200, and further the voicemail server 200 updates the agent 110 on the

workstation. This aspect of <u>Rigaldies et al.</u> is summarized as follows:

> The synchronization perform by the unified messaging system of the invention
> may be characterized as "two-way synchronization" because it is really a bilateral
> process performed between the *two* respective data stores of the voice-mail
> system and the e-mail system. Either end has to tell the other end what the other
> has done, hence *two* way.[6]

        Embodiments of the invention as presently claimed feature a mail server that is a *third*

device which is separate from both a first user computing device and a second user computing

device, where the mail server (1) receives information from the first user computing device

regarding every change made to the application database on the first user computing device,

(2) stores the information in a mail folder corresponding to a user associated with the first user

computing device and a second user computing device on the mail server, (3) receives a

synchronization request from the second user computing device, and (4) responsive to the

synchronization request, forwards the information from the mail folder to the second user

computing device. In this context, "the information" that is forwarded from the mail server to

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[6] <u>Rigaldies et al</u>. at col. 5 11. 7-12. (emphasis added)

the second user computing device is the information that the mail server received from the first

user computing device, where the information regards every change made to the application

database on the first user computing device. This differs from the two-way synchronization

disclosed by Rigaldes et al., where data stores of the voice-mail system and the e-mail system

tell the other what the other has done. A third entity is involved in the synchronization

disclosed by Rigaldes et al.; for example, Rigaldes et al. does *not* disclose a third entity telling

the e-mail system and possibly other systems what the voice-mail system has done, or the third

entity telling the voice-mail system and possibly other systems what the e-mail system has

done.

Additionally, the Examiner's rejection equates the voice-mail server 200 of Rigaldies

et al. with the mail server of Claim 1. The Examiner also equates the e-mail server 300 in

Rigaldies et al. with the first user device of Claim 1. The Examiner also equates the

workstation 101 in Rigaldies et al. with the second user device of Claim 1. In support of the

Examiner's contention that Rigaldies et al. discloses "by a mail server, receiving information

from a first user computing device regarding every change made to an application database

located on the first user computing device," the Examiner refers to portions of Rigaldies et al.

that speak generally about the voice-mail server 200 receiving information from workstation

101. Whereas the Examiner's mapping would require the voice-mail server 200 receiving

information from e-mail server 300 regarding every change made to an application database

located on the e-mail server 300.

The deficiencies of Rigaldies et al. noted above are not resolved with the reference to

Oberhaus et al. The Applicant notes that the portions of Oberhaus et al. cited by the Examiner

speak generally about synchronizing disparate email *systems* (112, 116) via a mail synch.

client 118. Whereas Claim 1 refers to synchronization of both a first user computing device

and a second user computing device, each of which maintains a copy of an application

database, *vis-à-vis* a mail server and mail folders on the mail server. These distinctions may be

illustrated with respect to FIG. 1 of Oberhaus et al., which is repeated below.
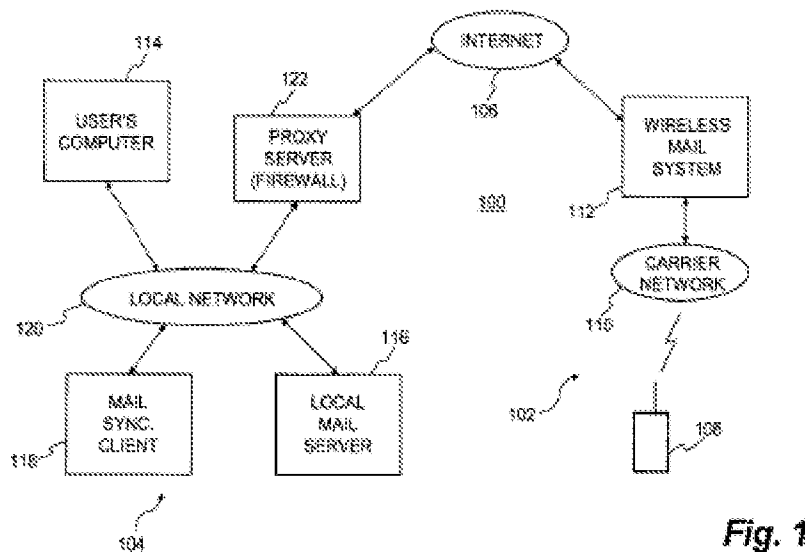
Fig. 1

Oberhaus et al. states:

FIG. 2B is a block diagram of a mail synchronization client 208 according to one
embodiment of the invention. The mail synchronization client 208 is, for example,
suitable for use as the mail synchronization client 118 illustrated in FIG. 1. The
mail synchronization client 208 includes a mail synchronization client process

210 that provides operations associated with synchronizing the wireless device mail server 204 with the local mail server 116. To facilitate the synchronization operations performed by the mail synchronization client process 210, the mail synchronization client 208 also includes a client mapping table 212, an inbox state table 214, and an action list 215. The client mapping table 212 is used to associate electronic mail messages on mobile devices 108 with those on the user's computer 114. The inbox state table 214 is used to save the state of the inbox for the user's computer 114 at the time in which the last synchronization occurred between the remote mail system 102 and the local mail system 104. The action list 215 contains a list of actions (i.e., synchronization actions) that have occurred with respect to the local mail server 116 since that last time the wireless device mail server 206 was synchronized with the local mail server 116.[7]

As can be seen from the above disclosure of <u>Oberhaus et al.</u>, <u>Oberhaus et al.</u> discloses a mail synch. client 118 performs synchronization between a local mail server 116 and a wireless mail system 112.

The Applicant assumes the Examiner is equating user's computer 114 and mobile device 108 of <u>Oberhaus et al.</u> Claim 1 requires "by a mail server, receiving information from a first user computing device regarding every change made to an application database located on the first user computing device," whereas mail synch client 118 apparently receives information from local mail server 118 and wireless mail system 112 of <u>Oberhaus et al.</u> (not user's computer 114 and mobile device 108 of <u>Oberhaus et al.</u>).

Claim 1 also requires "by the mail server, storing the information in a mail folder on the mail server, the mail folder corresponding to a user associated with the first user computing device and a second user computing device maintaining a copy of the application database." Whereas mail synch client 118 of <u>Oberhaus et al.</u> includes client mapping table 212 for merely

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[7] <u>Oberhaus et al.</u> at col. 6 l. 51 to col. 7 l. 5.

associating electronic mail messages on mobile devices 108 with those on the user's computer 114. Furthermore, mobile devices 108 and user's computer 114 of <u>Oberhaus et al.</u> apparently do not maintain a copy of the application database.

Claim 1 also requires "by the mail server, receiving a synchronization request from the second user computing device." Whereas <u>Oberhaus et al.</u> fails to disclose the synchronization request coming from user's computer 114 or mobile device 108. Rather, <u>Oberhaus et al.</u> discloses mail synch client 118 and mail synchronization server 206 of wireless mail system 112 interact to provide synchronization.[8]

Claim 1 also requires "responsive to the synchronization request, forwarding, by the mail server, the information from the mail folder to the second user computing device." Whereas mail synch client 118 of <u>Oberhaus et al.</u> synchronizes information between local mail server 116 and wireless system 112 rather than user's computer 114 and mobile device 108 of <u>Oberhaus et al.</u>

Furthermore, independent claim 1 requires the user computing device maintain a copy of the application database. Whereas the Examiner refers generally to temporary storage of mail items in a volatile memory such as a random-access memory. The Applicant respectfully submits the Examiner's attempt to equate storing temporary copies of discrete mail items, with maintaining a copy of an *application database*, is improper.

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[8] <u>Oberhaus et al.</u> at col. 3 ll. 48-54.

For at least the above reasons, the Applicant respectfully submits the limitations of Claim 1 are not disclosed or suggested by the cited art of record.

As the limitations of Claim 1 are not disclosed or suggested by the cited art of record, the Applicant respectfully requests the 35 U.S.C. § 103 rejection of Claim 1 be withdrawn.

Independent Claims 9, 18, 27, 29, 31, 33, 41, 51, and 60-62

Claims 9, 18, 27, 29, 31, 33, 41, 51, and 60-62 include limitations similar to those discussed above with respect to Claim 1. Claim 1 being allowable, Claims 9, 18, 27, 29, 31, 33, 41, 51, and 60-62 must also be allowable.

Dependent Claims 2, 5, 8, 10-11, 14, 17, 19-20, 23, 26, 28, 30, 32, 34, 37, 39-40, 42-43, 46, 49, 50, 52-53, 56, and 59

Claims 2, 5, and 8 depend from Claim 1, Claims 10-11, 14, and 17 depend from Claim 9. Claims 19-20, 23, and 26 depend from Claim 18. Claim 28 depends from Claim 27. Claim 30 depends from Claim 29. Claim 32 depends from Claim 31. Claims 34, 37, and 39-40 depend from Claim 33. Claims 42-43, 46, 49, and 50 depend from Claim 41. Claims 52-53, 56, and 59 depend from Claim 51. Claims 1, 9, 18, 27, 29, 31, 33, 41, and 51 being allowable, Claims 2, 5, 8, 10-11, 14, 17, 19-20, 23, 26, 28, 30, 32 must also be allowable.

Rejection of Claims 3, 12, 21, 35, 44, and 54 under 35 U.S.C. § 103(a)

The 35 U.S.C. § 103 rejection of independent Claims 1, 9, 18, 27, 29, 31, 33, 41, 51, and

60-62 based on Rigaldies et al. in view of Oberhaus et al. is unsupported by the cited art of record, as Rigaldies et al. in view of Oberhaus et al. does not teach or suggest all claim limitations. Accordingly, the 35 U.S.C. § 103(a) of dependent claims 3, 12, 21, 35, 44, and 54 based on Rigaldies et al. in view of Oberhaus et al. and further in view of Christie et al. is unsupported by the art because the combination of Rigaldies et al. in view of Oberhaus et al. and Christie et al. does not teach all claim limitations.

Rejection of Claims 4, 6, 13, 15, 22, 24, 36, 38, 45, 47, 55, and 57 under 35 U.S.C. § 103(a)

The 35 U.S.C. § 103 rejection of independent Claims 1, 9, 18, 27, 29, 31, 33, 41, 51, and 60-62 based on Rigaldies et al. in view of Oberhaus et al. is unsupported by the art, as Rigaldies et al. in view of Oberhaus et al. does not teach or suggest all claim limitations. Accordingly, the 35 U.S.C. § 103(a) of dependent claims 4, 6, 13, 15, 22, 24, 36, 38, 45, 47, 55, and 57 based on Rigaldies et al. in view of Oberhaus et al. and further in view of LaRue et al. is unsupported by the art because the combination of Rigaldies et al. in view of Oberhaus et al. and further in view of LaRue et al. does not teach all claim limitations.

Rejection of Claims 7, 16, 25, 48, and 58 under 35 U.S.C. § 103(a)

The 35 U.S.C. § 103 rejection of independent Claims 1, 9, 18, 27, 29, 31, 33, 41, 51, and 60-62 based on Rigaldies et al. in view of Oberhaus et al. is unsupported by the art, as Rigaldies et al. in view of Oberhaus et al. does not teach or suggest all claim limitations. Accordingly, the 35 U.S.C. § 103(a) of dependent claims 7, 16, 25, 48, and 58 based on Rigaldies et al. in view of Oberhaus et al. and further in view of Malik is unsupported by the art because the combination of Rigaldies et al. in view of Oberhaus et al. and further in view

Malik does not teach all claim limitations.

Claims Appendix

1. A computer implemented method comprising:

   by a mail server, receiving information from a first user computing device regarding every change made to an application database located on the first user computing device;

   by the mail server, storing the information in a mail folder on the mail server, the mail folder corresponding to a user associated with the first user computing device and a second user computing device maintaining a copy of the application database;

   by the mail server, receiving a synchronization request from the second user computing device; and

   responsive to the synchronization request, forwarding, by the mail server, the information from the mail folder to the second user computing device.

2. The method of claim 1, wherein the information includes a record for each change made to the application database since a last synchronization.

3. The method of claim 2, wherein the record for each change includes an identification of the user computing device where the change took place.

4. The method of claim 2, wherein the record for each change includes a time stamp indicating the time the record is synchronized with the mail server.

5. The method of claim 2, wherein the record for each change includes an identification of the record.

6. The method of claim 2, wherein the record for each change includes a time stamp indicating the time the corresponding change to the database was made.

7. The method of claim 2, wherein the record for each change includes a location and identity of attachment documents associated with a change-action-queue record.

8. The method of claim 1, further comprising:

deleting the information from the mail folder after the forwarding.

9. A computer implemented method comprising:

by a first user computing device, generating a record each time an application database located on the first user computing device is changed, the record containing information regarding the change;

by the first user computing device, uploading each of the records generated since a last synchronization to a mail server;

by the mail server, storing each of the records in a mailbox on the mail server, the mailbox for a user associated with the first user computing device and a second user computing device;

by the mail server, receiving a synchronization request from the second user computing device;

responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device; and

by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded

records.

10. The method of claim 9, wherein the uploading occurs in response to a request for synchronization on the first user computing device.

11. The method of claim 9, wherein the downloading occurs in response to a request for synchronization on the second user computing device.

12. The method of claim 9, wherein the record for each change includes an identification of the user computing device where the change took place.

13. The method of claim 9, wherein the record for each change includes a time stamp indicating the time the record is synchronized with the mail server.

14. The method of claim 9, wherein the record for each change includes an identification of the record.

15. The method of claim 9, wherein the record for each change includes a time stamp indicating the time the corresponding change to the database was made.

16. The method of claim 9, wherein the record for each change includes a location and identity of attachment documents associated with a change-action-queue record.

17. The method of claim 9, further comprising:

deleting the records from the mailbox after the downloading.

18. A computer implemented method comprising:

by a first user computing device, generating a list of records of each change to an application database located on the first user computing device since a last synchronization, each record containing information regarding the corresponding change;

by the first user computing device, uploading each of the records to a mail server;

by the mail server, storing each of the records in a mailbox on the mail server, the mailbox for a user associated with the first user computing device and a second user computing device;

by the mail server, receiving a synchronization request from the second user computing device;

responsive to the synchronization request, downloading, by the mail server, each of the records from the mailbox to the second user computing device; and

by the second user computing device, modifying an application database located on the second user computing device with changes indicated by each of the downloaded records.

19. The method of claim 18, wherein the uploading occurs in response to a request for synchronization on the first user computing device.

20. The method of claim 18, wherein the downloading occurs in response to a request for

synchronization on the second user computing device.

21. The method of claim 18, wherein the record for each change includes an identification of the user computing device where the change took place.

22. The method of claim 18, wherein the record for each change includes a time stamp indicating the time the record is synchronized with the mail server.

23. The method of claim 18, wherein the record for each change includes an identification of the record.

24. The method of claim 18, wherein the record for each change includes a time stamp indicating the time the corresponding change to the database was made.

25. The method of claim 18, wherein the record for each change includes a location and identity of attachment documents associated with a change-action-queue record.

26. The method of claim 18, further comprising:

   deleting the records from the mailbox after the downloading.

27. An apparatus comprising:

   a memory;

   a first user computing device database change information receiver configured to receive

      information from a first user computing device regarding every change made to an

application database located on the first user computing device;

a first user computing device database change information mail folder storer coupled to the

first user computing device database change information receiver and to the memory

and configured to store the information in a mail folder corresponding to a user

associated with the first user computing device and a second user computing device, the

apparatus further configured to receive a synchronization request from the second user

computing device; and

a first user computing device database change information forwarder coupled to the memory

and configured to, responsive to the synchronization request, forward the information

from the mail folder to the second user computing device, the second user computing

device further configured to maintain a copy of the application database.

28. The apparatus of claim 27, further comprising a first device database change information

deleter coupled to the first device database change information second device forwarder.

29. An apparatus comprising:

a first device application database change record generator configured to generate a record

each time an application database is changed on a first user computing device, the

record containing information regarding the change;

a mail server change record uploader coupled to the first device application database change

record generator and configured to upload each of the records generated since a last

synchronization to a mail server;

a memory;

a change record mailbox storer coupled to the memory and configured to store each of the

records in a mailbox on the mail server, the mailbox for a user associated with the first

user computing device and a second user computing device, the apparatus further

configured to receive a synchronization request from the second user computing device;

a change record second device downloader coupled to the memory and configured to,

responsive to the synchronization request, download each of the records from the

mailbox to the second user computing device; and

a second device application database modifier coupled to the change record second device

downloader and configured to modify an application database located on the second

user computing device with changes indicated by each of the downloaded records.

30. The apparatus of claim 29, further comprising a change record deleter coupled to the change

record second device downloader and to the memory.

31. (Currently Amended) An apparatus comprising:

a first device application database change record list generator and configured to generate a

list of records of each change to an application database located on a first user

computing device since a last synchronization, each record containing information

regarding the corresponding change;

a mail server change record uploader coupled to the first device application database change

record list generator and configured to upload each of the records to a mail server;

a memory;

a change record mailbox storer coupled to the memory and configured to store each of the

records in a mailbox on the mail server, the mailbox for a user associated with the first

user computing device and a second user computing device, the apparatus further

configured to receive a synchronization request from the second user computing device;

a change record second device downloader coupled to the memory and configured to,

responsive to the synchronization request, download each of the records from the

mailbox to the second user computing device; and

a second device application database modifier coupled to the change record second device

downloader and configured to modify an application database located on the second

user computing device with changes indicated by each of the downloaded records.

32. The apparatus of claim 31, further comprising a change record deleter coupled to the change

record second device downloader and to the memory.

33. An apparatus comprising:

means for receiving, by a mail server, information from a first user computing device

regarding every change made to an application database located on the first user

computing device;

means for storing, by the mail server, the information in a mail folder corresponding to a

user associated with the first user computing device and a second user computing

device;

means for receiving, by the mail server, a synchronization request from the second user

computing device; and

means for forwarding, by the mail server, the information from the mail folder to the second

user computing device, the second user computing device maintaining a copy of the

application database.

34. The apparatus of claim 33, wherein the information includes a record for each change made

to the application database since a last synchronization.

35. The apparatus of claim 34, wherein the record for each change includes an identification of

the user computing device where the change took place.

36. The apparatus of claim 34, wherein the record for each change includes a time stamp

indicating the time the record is synchronized with the mail server.

37. The apparatus of claim 34, wherein the record for each change includes an identification of

the record.

38. The apparatus of claim 34, wherein the record for each change includes a time stamp

indicating the time the corresponding change to the database was made.

39. The apparatus of claim 34, further comprising:

means for deleting the records from the mailbox after the downloading.

40. The apparatus of claim 33, further comprising:

means for deleting the information from the mail folder after the forwarding.

41. An apparatus comprising:

　means for generating, by a first user computing device, a record each time an application

　　database is changed on a first user computing device, the record containing information

　　regarding the change;

　means for uploading, by the first user computing device, each of the records generated since

　　a last synchronization to a mail server;

　means for storing, by the mail server, each of the records in a mailbox for a user associated

　　with the first user computing device and a second user computing device;

　means for receiving, by the mail server, a synchronization request from the second user

　　computing device;

　means for, responsive to the synchronization request, downloading, by the mail server, each

　　of the records from the mailbox to the second user computing device; and

　means for modifying, by the second user computing device, an application database located

　　on the second user computing device with changes indicated by each of the downloaded

　　records.

42. The apparatus of claim 41, wherein the uploading occurs in response to a request for

　synchronization on the first user computing device.

43. The apparatus of claim 41, wherein the downloading occurs in response to a request for

　synchronization on the second user computing device.

44. The apparatus of claim 41, wherein the record for each change includes an identification of

the user computing device where the change took place.

45. The apparatus of claim 41, wherein the record for each change includes a time stamp
indicating the time the record is synchronized with the mail server.

46. The apparatus of claim 41, wherein the record for each change includes an identification of
the record.

47. The apparatus of claim 41, wherein the record for each change includes a time stamp
indicating the time the corresponding change to the database was made.

48. The apparatus of claim 41, wherein the record for each change includes a location and
identity of attachment documents associated with a change-action-queue record.

49. The apparatus of claim 41, further comprising:
means for deleting the records from the mailbox after the downloading.

50. The apparatus of claim 41, further comprising:
means for deleting the records from the mailbox after the downloading.

51. An apparatus comprising:
means for generating, by a first user computing device, a list of records of each change to an
application database located on the first user computing device since a last
synchronization, each record containing information regarding the corresponding

change;

means for uploading, by the first user computing device, each of the records to a mail server;

means for storing, by the mail server, each of the records in a mailbox for a user associated

with the first user computing device and a second user computing device;

means for, by the mail server, receiving a synchronization request from the second user

computing device;

means for, responsive to the synchronization request, downloading, by the mail server, each

of the records from the mailbox to the second user computing device; and

means for, by the second user computing device, modifying an application database located

on the second user computing device with changes indicated by each of the downloaded

records.

52. The apparatus of claim 51, wherein the uploading occurs in response to a request for

synchronization on the first user computing device.

53. The apparatus of claim 51, wherein the downloading occurs in response to a request for

synchronization on the second user computing device.

54. The apparatus of claim 51, wherein the record for each change includes an identification of

the user computing device where the change took place.

55. The apparatus of claim 51, wherein the record for each change includes a time stamp

indicating the time the record is synchronized with the mail server.

56. The apparatus of claim 51, wherein the record for each change includes an identification of
the record.

57. The apparatus of claim 51, wherein the record for each change includes a time stamp
indicating the time the corresponding change to the database was made.

58. The apparatus of claim 51, wherein the record for each change includes a location and
identity of attachment documents associated with a change-action-queue record.

59. The apparatus of claim 51, further comprising:
means for deleting the records from the mailbox after the downloading.

60. A program storage device readable by a machine, tangibly embodying a program of
instructions executable by the machine to perform a method, the method comprising:
by a mail server, receiving information from a first user computing device regarding every
change made to an application database located on the first user computing device;
by the mail server, storing the information in a mail folder on the mail server, the mail folder
corresponding to a user associated with the first user computing device and a second
user computing device maintaining a copy of the application database;
by the mail server, receiving a synchronization request from the second user computing
device and
responsive to the synchronization request, forwarding, by the mail server, the information
from the mail folder to the second user computing device.

61. A program storage device readable by a machine, tangibly embodying a program of

   instructions executable by the machine to perform a method, the method comprising:

   by a first user computing device, generating a record each time an application database

   located on the first user computing device is changed, the record containing information

   regarding the change;

   by the first user computing device, uploading each of the records generated since a last

   synchronization to a mail server;

   by the mail server, storing each of the records in a mailbox on the mail server, the mailbox

   for a user associated with the first user computing device and a second user computing

   device;

   by the mail server, receiving a synchronization request from the second user computing

   device;

   responsive to the synchronization request, downloading, by the mail server, each of the

   records from the mailbox to the second user computing device; and

   by the second user computing device, modifying an application database located on the

   second user computing device with changes indicated by each of the downloaded

   records.

62. A program storage device readable by a machine, tangibly embodying a program of

   instructions executable by the machine to perform a method, the method comprising:

   by a first user computing device, generating a list of records of each change to an

   application database located on the first user computing device since a last

   synchronization, each record containing information regarding the corresponding

change;

by the first user computing device, uploading each of the records to a mail server;

by the mail server, storing each of the records in a mailbox on the mail server, the mailbox

for a user associated with the first user computing device and a second user computing

device;

by the mail server, receiving a synchronization request from the second user computing

device;

responsive to the synchronization request, downloading, by the mail server, each of the

records from the mailbox to the second user computing device; and

by the second user computing device, modifying an application database located on the

second user computing device with changes indicated by each of the downloaded

records.

Evidence Appendix

None.

Related Proceedings Appendix

None.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-3557.

Respectfully submitted,

NIXON PEABODY LLP

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